

Checklist of the infraorder Tipulomorpha (Trichoceridae, Tipuloidea) (Diptera) of Finland

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Abstract

A checklist of the infraorder Tipulomorpha: families Trichoceridae, Pediciidae, Limoniidae, Cylindrotomidae and Tipulidae (Diptera) recorded from Finland.

Keywords

Checklist, Finland, Diptera, Trichoceridae, Pediciidae, Limoniidae, Cylindrotomidae, Tipulidae

Introduction

Trichoceridae is a small family of medium sized gnats, mostly of Holarctic distribution. Larvae live in different decaying matter like leaves, wood, fungi or dead mammals. Adults form numerous swarms that are encountered during colder fall and spring months or warmer winter days in warmer climates or during the short summer months in northern latitudes.

No comprehensive and up to date key exists for north European adults or larvae, but a combination of Shtackelberg (1988), Starý (1999) and Petrašiūnas (2009) could be used. However, Shtackelberg (1988) must be used with caution because several species have since been published. List of trichocerids presented here is based on literature review (see Dahl 1968, Dahl and Alexander 1976), no new material has been studied.

Family	Number of species in			T1 - C11 - 1
	World (Oosterbroek 2014)	Europe (Pape et al. 2011)	Finland	Level of knowledge
Tipulomorpha:				
Trichoceridae	183	50	15–17	poor-average
Pediciidae	490	63	19	good
Limoniidae	10528	545	196	good
Cylindrotomidae	71	7	7	good
Tipulidae	4280	456	114–115	good

Table 1. Number of species by family.

Tipuloidea crane flies (Pediciidae, Limoniidae, Cylindrotomidae and Tipulidae) belong to the infraorder Tipulomorpha together with trichocerids (Wiegmann et al. 2011). Following Starý (1992), most European authors distinguish four families: Limoniidae, Tipulidae, Pediciidae and Cylindrotomidae. North American authors, strongly influenced by C.P. Alexander, usually prefer a single family, Tipulidae; other families, sensu Starý, are there subfamilies or tribes (Byers 1992, Petersen et al. 2010). According to a recent phylogenetic analysis (Petersen et al. 2010), two families are recognized, Tipulidae and Pediciidae, but the consensus tree of that analysis had many unresolved polytomies. Crane fly larvae occur usually in moist or (semi)aquatic habitats, but larvae may also be found on mosses, in dry soil, fungal fruiting bodies and dead wood. Cylindrotomids are herbivorous, feeding on vascular plants or mosses. Most larvae of (semi)aquatic species have open spiracles and are dependent on aerial oxygen supply, but truly aquatic species are able to withdraw dissolved oxygen through the cuticle of tracheal gills.

An annotated list of Finnish crane flies was provided by Salmela (2012a) and a few species were later added in subsequent papers (Salmela 2012b, 2013). Species richness of Finnish crane flies is negatively correlated with latitude but mire-dwelling crane flies have anomal species richness gradient (Salmela 2012). Finnish crane flies are rather well known, but perhaps up to 20 more species could be found from Finland (Salmela 2013).

Checklist

Nematocera Dumeril, 1805 infraorder Tipulomorpha Rohdendorf, 1961

TRICHOCERIDAE Róndani, 1841

CLADONEURA Scudder, 1894

= Diazosma Bergroth, 1913

? Cladoneura hirtipenne (Siebke, 1863)

TRICHOCERA Meigen, 1803

sg. Metatrichocera Dahl, 1966

Trichocera gigantea (Dahl, 1967)

Trichocera lutea Becher, 1886

Trichocera mackenziei (Dahl, 1967)

sg. Saltrichocera Krzeminska, 2002

Trichocera annulata Meigen, 1818

? Trichocera arctica Lundström, 1915

Trichocera implicata Dahl, 1976

Trichocera maculipennis Meigen, 1818

Trichocera parva Meigen, 1804

Trichocera regelationis (Linnaeus, 1758)

Trichocera rufescens Edwards, 1921

Trichocera saltator (Harris, 1776)

= fuscata Meigen, 1818

Trichocera sparsa Starý & Martinovský, 1996

sg. Trichocera Meigen, 1803

Trichocera hiemalis (De Geer, 1776)

Trichocera inexplorata (Dahl, 1967)

Trichocera major Edwards, 1921

Trichocera sibirica Edwards, 1920

PEDICIIDAE Osten Sacken, 1860

PEDICIINAE Osten Sacken, 1860

DICRANOTA Zetterstedt, 1838

sg. Dicranota Zetterstedt, 1838

Dicranota bimaculata (Schummel, 1829)

Dicranota crassicauda Tjeder, 1972

Dicranota guerini Zetterstedt, 1838

sg. *Paradicranota* Alexander, 1934

Dicranota gracilipes Wahlgren, 1905

Dicranota pavida (Haliday, 1833)

Dicranota robusta Lundström, 1912

Dicranota subtilis Loew, 1871

sg. Rhaphidolabis Osten Sacken, 1869

Dicranota exclusa (Walker, 1848)

PEDICIA Latreille, 1809

sg. Crunobia Kolenati, 1859

Pedicia straminea (Meigen, 1838)

sg. Pedicia Latreille, 1809

Pedicia rivosa (Linnaeus, 1758)

TRICYPHONA Zetterstedt, 1837

sg. Tricyphona Zetterstedt, 1837

Tricyphona immaculata (Meigen, 1804)

Tricyphona livida Madarassy, 1881

Tricyphona schummeli Edwards, 1921

Tricyphona unicolor (Schummel, 1829)

ULINAE Alexander, 1920

ULA Haliday, 1833

sg. Ula Haliday, 1833

Ula bolitophila Loew, 1869

Ula kiushiuensis Loew, 1869

Ula mixta Starý, 1983

Ula mollissima Haliday, 1833

= inconclusa (Walker, 1856)

Ula sylvatica (Meigen, 1818)

LIMONIIDAE Speiser, 1909

CHIONEINAE Róndani, 1841

ARCTOCONOPA Alexander, 1955

Arctoconopa forcipata (Lundström, 1915)

Arctoconopa obscuripes (Zetterstedt, 1851)

Arctoconopa zonata (Zetterstedt, 1851)

CHEILOTRICHIA Rossi, 1848

sg. Cheilotrichia Rossi, 1848

Cheilotrichia imbuta (Meigen, 1818)

sg. Empeda Osten Sacken, 1869

Cheilotrichia areolata (Lundström, 1912)

Cheilotrichia cinerascens (Meigen, 1804)

= nubila (Schummel, 1829)

Cheilotrichia neglecta (Lackschewitz, 1927)

CHIONEA Dalman, 1816

sg. Chionea Dalman, 1816

Chionea araneoides Dalman, 1816

= minuta Tahvonen, 1932

Chionea crassipes Boheman, 1846

sg. Sphaeconophilus Becker, 1912

Chionea lutescens Lundström, 1907

= brevirostris Tahvonen, 1932

CRYPTERIA Bergroth, 1913

Crypteria limnophiloides Bergroth, 1913

ERIOCONOPA Stary, 1976

Erioconopa diuturna (Walker, 1848)

Erioconopa trivialis (Meigen, 1818)

ERIOPTERA Meigen, 1803

sg. Erioptera Meigen, 1803

Erioptera beckeri Kuntze, 1914

= fuscipennis misid.

Erioptera divisa (Walker, 1848)

Erioptera flavata (Westhoff, 1882)

= gemina Tjeder, 1967

Erioptera griseipennis Meigen, 1838

Erioptera lutea Meigen, 1804

Erioptera nielseni Meijere, 1921

Erioptera pederi Tjeder, 1969

Erioptera sordida Zetterstedt, 1838

Erioptera squalida Loew, 1871

Erioptera tordi Tjeder, 1973

GNOPHOMYIA Osten Sacken, 1860

Gnophomyia acheron Alexander, 1950

Gnophomyia lugubris (Zetterstedt, 1838)

Gnophomyia viridipennis (Gimmerthal, 1847)

GONEMPEDA Alexander, 1924

Gonempeda flava (Schummel, 1829)

GONOMYIA Meigen, 1818

sg. Gonomyia Meigen, 1818

Gonomyia abscondita Lackschewitz, 1935

= lucidula misid.

Gonomyia bifida Tonnoir, 1920

Gonomyia dentata Meijere, 1920

Gonomyia simplex Tonnoir, 1920

Gonomyia stackelbergi Lackschewitz, 1935

Gonomyia tenella (Meigen, 1818)

sg. *Teuchogonomyia* Alexander, 1968

Gonomyia edwardsi Lackschewitz, 1925

HOPLOLABIS Osten Sacken, 1869

sg. Parilisia Savchenko, 1976

Hoplolabis areolata (Siebke, 1872)

Hoplolabis vicina (Tonnoir, 1920)

MOLOPHILUS Curtis, 1833

sg. Molophilus Curtis, 1833

Molophilus appendiculatus (Staeger, 1840)

Molophilus ater (Meigen, 1804)

Molophilus bifidus Goetghebuer, 1920

Molophilus bihamatus Meijere, 1918

Molophilus cinereifrons Meijere, 1920

Molophilus corniger Meijere, 1920

Molophilus crassipygus Meijere, 1918

= ochrescens Edwards, 1938

Molophilus flavus Goetghebuer, 1920

Molophilus griseus (Meigen, 1804)

Molophilus medius Meijere, 1918

Molophilus obscurus (Meigen, 1818)

Molophilus occultus Meijere, 1918

Molophilus ochraceus (Meigen, 1818)

Molophilus propinquus (Egger, 1863)

Molophilus pullus Lackschewitz, 1927

NEOLIMNOPHILA Alexander, 1920

Neolimnophila carteri (Tonnoir, 1921)

Neolimnophila placida (Meigen, 1830)

ORMOSIA Rondani, 1856

sg. Oreophila Lackschewitz, 1935

Ormosia sootryeni (Lackschewitz, 1935)

sg. *Ormosia* Rondani, 1856

Ormosia brevinervis (Lundström, 1907)

Ormosia clavata (Tonnoir, 1920)

Ormosia depilata Edwards, 1938

Ormosia fascipennis (Zetterstedt, 1838)

Ormosia hederae (Curtis, 1835)

Ormosia lineata (Meigen, 1804)

Ormosia loxia Starý, 1983

Ormosia pseudosimilis (Lundström, 1912)

Ormosia ruficauda (Zetterstedt, 1838)

Ormosia staegeriana Alexander, 1953

PHYLLOLABIS Osten Sacken, 1877

Phyllolabis macroura (Siebke, 1863)

RHABDOMASTIX Skuse, 1890

Rhabdomastix borealis Alexander, 1924

Rhabdomastix laeta (Loew, 1873)

Rhabdomastix parva (Siebke, 1863)

RHYPHOLOPHUS Kolenati, 1860

Rhypholophus haemorrhoidalis (Zetterstedt, 1838)

Rhypholophus varius (Meigen, 1818)

SCLEROPROCTA Edwards, 1938

Scleroprocta pentagonalis (Loew, 1973)

Scleroprocta sororcula (Zetterstedt, 1851)

= danica (Nielsen, 1923)

SYMPLECTA Meigen, 1830

sg. Psiloconopa Zetterstedt, 1838

Symplecta lindrothi (Tjeder, 1955)

Symplecta meigeni (Zetterstedt, 1838)

Symplecta stictica (Meigen, 1818)

sg. Symplecta Meigen, 1830

Symplecta chosenensis (Alexander, 1940)

Symplecta hybrida (Meigen, 1804)

Symplecta mabelana (Alexander, 1955)

Symplecta scotica (Edwards, 1938)

sg. Trimicra Osten Sacken, 1861

Symplecta pilipes (Fabricius, 1787)

TASIOCERA Skuse, 1890

sg. Dasymolophilus Goetghebuer, 1920

Tasiocera exigua Savchenko, 1973

Tasiocera fuscescens (Lackschewitz, 1940)

Tasiocera murina (Meigen, 1818)

LIMNOPHILINAE Bigot, 1854

ADELPHOMYIA Bergroth, 1891

Adelphomyia punctum (Meigen, 1818)

AUSTROLIMNOPHILA Alexander, 1920

sg. Archilimnophila Alexander, 1934

Austrolimnophila harperi (Alexander, 1926)

Austrolimnophila unica (Osten Sacken, 1869)

DICRANOPHRAGMA Osten Sacken, 1860

sg. Brachylimnophila Alexander, 1966

Dicranophragma adjunctum (Walker, 1848)

Dicranophragma separatum (Walker, 1848)

- = *nemorale* misid.
- = leucophaea misid.

ELOEOPHILA Rondani, 1856

Eloeophila maculata (Meigen, 1804)

Eloeophila mundata (Loew, 1971)

Eloeophila submarmorata (Verrall, 1887)

Eloeophila trimaculata (Zetterstedt, 1838) Eloeophila verralli (Bergroth, 1912)

EPIPHRAGMA Osten Sacken, 1860

sg. Epiphragma Osten Sacken, 1860

Epiphragma ocellare (Linnaeus, 1761)

EUPHYLIDOREA Alexander, 1972

Euphylidorea dispar (Meigen, 1818)

= *lineola* misid.

Euphylidorea meigeni (Verrall, 1886)

Euphylidorea phaeostigma (Schummel, 1829)

EUTONIA van der Wulp, 1874

Eutonia barbipes (Meigen, 1804)

HEXATOMA Latreille, 1809

sg. Hexatoma Latreille, 1809

Hexatoma fuscipennis (Curtis, 1836)

= *nubeculosa* misid.

IDIOPTERA Macquart, 1834

Idioptera linnei Oosterbroek, 1992

= fasciata (Linnaeus, 1767) preocc.

Idioptera pulchella (Meigen, 1830)

= pulchella var. macropteryx (Tjeder, 1955)

LIMNOPHILA Macquart, 1834

sg. Limnophila Macquart, 1834

Limnophila pictipennis (Meigen, 1818)

Limnophila schranki Oosterbroek, 1992

= punctata (Schrank, 1781)

NEOLIMNOMYIA Seguy, 1937

sg. Neolimnomyia Seguy, 1937

Neolimnomyia batava (Edwards, 1938)

PARADELPHOMYIA Alexander, 1936

sg. Oxyrhiza de Meijere, 1946

Paradelphomyia fuscula (Loew, 1873)

Paradelphomyia nigrina (Lackschewitz, 1940)

PHYLIDOREA Bigot, 1854

sg. Macrolabina Savchenko, 1986

Phylidorea nigronotata (Siebke, 1870)

sg. Paraphylidorea Savchenko, 1986

Phylidorea fulvonervosa (Schummel, 1829)

= Euphylidorea lineola misid.

sg. Phylidorea Bigot, 1854

Phylidorea abdominalis (Staeger, 1840)

Phylidorea bicolor (Meigen, 1804)

Phylidorea ferruginea (Meigen, 1818)

Phylidorea heterogyna (Bergroth, 1913)

Phylidorea longicornis (Schummel, 1829)

= glabricula (Meigen, 1830)

Phylidorea nervosa (Schummel, 1829)

= nigricollis (Meigen, 1830)

Phylidorea squalens (Zetterstedt, 1838)

Phylidorea umbrarum (Krogerus, 1937)

PILARIA Sintenis, 1889

Pilaria decolor (Zetterstedt, 1851)

Pilaria discicollis (Meigen, 1818)

Pilaria meridiana (Staeger, 1840)

Pilaria nigropunctata (Agrell, 1945)

= fuscipennis misid.

Pilaria scutellata (Staeger, 1840)

PSEUDOLIMNOPHILA Alexander, 1919

sg. Pseudolimnophila Alexander, 1919

Pseudolimnophila lucorum (Meigen, 1818)

LIMONIINAE Speiser, 1909

ACHYROLIMONIA Alexander, 1965

Achyrolimonia decemmaculata (Loew, 1873)

ANTOCHA Osten Sacken, 1860

sg. Antocha Osten Sacken, 1860

Antocha vitripennis (Meigen, 1830)

ATYPOPHTHALMUS Brunetti, 1911

sg. Atypophthalmus Brunetti, 1911

Atypophthalmus inustus (Meigen, 1818)

DICRANOMYIA Stephens, 1829

sg. Dicranomyia Stephens, 1829

Dicranomyia aperta Wahlgren, 1904

Dicranomyia autumnalis (Staeger, 1840)

Dicranomyia consimilis (Zetterstedt, 1838)

Dicranomyia didyma (Meigen, 1804)

Dicranomyia distendens Lundström, 1912

Dicranomyia frontalis (Staeger, 1840)

Dicranomyia halterata Osten Sacken, 1869

Dicranomyia handlirschi Lackschewitz, 1928

Dicranomyia hyalinata (Zetterstedt, 1851)

Dicranomyia longipennis (Schummel, 1829)

Dicranomyia mitis (Meigen, 1830)

Dicranomyia modesta (Meigen, 1818)

Dicranomyia moniliformis Doane, 1900

Dicranomyia omissinervis Meijere, 1918

Dicranomyia patens Lundström, 1907

Dicranomyia radegasti Starý, 1993

Dicranomyia sera (Walker, 1848)

Dicranomyia terraenovae Alexander, 1920

Dicranomyia ventralis (Schummel, 1829)

Dicranomyia zernyi Lackschewitz, 1928

sg. Glochina Meigen, 1830

Dicranomyia liberta Osten Sacken, 1860

Dicranomyia tristis (Schummel, 1829)

- = subtristis Alexander, 1924
- = *schineri* misid.
- = *schineriana* misid.

sg. Idiopyga Savchenko, 1987

Dicranomyia danica Kuntze, 1919

Dicranomyia esbeni (Nielsen, 1940)

Dicranomyia halterella Edwards, 1921

Dicranomyia intricata Alexander, 1927

Dicranomyia klefbecki (Tjeder, 1941)

Dicranomyia lulensis (Tjeder, 1969)

Dicranomyia magnicauda Lundström, 1912

Dicranomyia murina (Zetterstedt, 1851)

Dicranomyia ponojensis Lundström, 1912

Dicranomyia stigmatica (Meigen, 1830)

sg. Melanolimonia Alexander, 1965

Dicranomyia caledonica Edwards, 1926

Dicranomyia morio (Fabricius, 1787)

Dicranomyia occidua Edwards, 1926

Dicranomyia rufiventris (Strobl, 1901)

Dicranomyia stylifera Lackschewitz, 1928

sg. Numantia Bigot, 1854

Dicranomyia fusca (Meigen, 1804)

DICRANOPTYCHA Osten Sacken, 1860

Dicranoptycha cinerascens (Meigen, 1818)

Dicranoptycha fuscescens (Schummel, 1829)

DISCOBOLA Osten Sacken, 1865

Discobola annulata (Linnaeus, 1758)

Discobola caesarea (Osten Sacken, 1854)

ELEPHANTOMYIA Osten Sacken, 1860

sg. *Elephantomyia* Osten Sacken, 1860

Elephantomyia edwardsi Lackschewitz, 1932

Elephantomyia krivosheinae Savchenko, 1976

HELIUS Lepeletier & Serville, 1828

sg. Helius Lepeletier & Serville, 1828

Helius flavus (Walker, 1856)

Helius longirostris (Meigen, 1818)

Helius pallirostris Edwards, 1921

LIBNOTES Westwood, 1876

sg. Afrolimonia Alexander, 1965

Libnotes ladogensis (Lackschewitz, 1940)

LIMONIA Meigen, 1803

sg. Limnobia Meigen, 18018

Limonia badia (Walker, 1848)

Limonia flavipes (Fabricius, 1787)

Limonia macrostigma (Schummel, 1829)

Limonia maculicosta (Coquillett, 1905)

Limonia messaurea Mendl, 1971

Limonia nubeculosa Meigen, 1804

Limonia phragmitidis (Schrank, 1781)

= *tripunctata* Fabricius, 1781

Limonia stigma (Meigen, 1818)

Limonia sylvicola (Schummel, 1829)

Limonia trivittata (Schummel, 1829)

LIPSOTHRIX Loew, 1873

Lipsothrix ecucullata Edwards, 1938

Lipsothrix errans (Walker, 1848)

METALIMNOBIA Matsumura, 1911

sg. Metalimnobia Matsumura, 1911

Metalimnobia bifasciata (Schrank, 1781)

Metalimnobia charlesi Salmela & Starý, 2008

Metalimnobia quadrimaculata (Linnaeus, 1761)

Metalimnobia quadrinotata (Meigen, 1818)

Metalimnobia tenua Savchenko, 1976

Metalimnobia zetterstedti (Tjeder, 1968)

= elegans Zetterstedt, 1838 preocc.

NEOLIMONIA Alexander, 1964

Neolimonia dumetorum (Meigen, 1804)

ORIMARGA Osten Sacken, 1869

sg. Orimarga Osten Sacken, 1869

Orimarga attenuata (Walker, 1848)

Orimarga juvenilis (Zetterstedt, 1851)

RHIPIDIA Meigen, 1818

sg. Rhipidia Meigen, 1818

Rhipidia maculata Meigen, 1818

= duplicata (Doane, 1900)

Rhipidia uniseriata Schiner, 1864

CYLINDROTOMIDAE Schiner, 1863

CYLINDROTOMA Macquart, 1834

Cylindrotoma borealis Peus, 1952

Cylindrotoma distinctissima (Meigen, 1818)

Cylindrotoma nigriventris Loew, 1849

DIOGMA Edwards, 1938

Diogma caudata Takahashi, 1960

Diogma glabrata (Meigen, 1818)

PHALACROCERA Schiner, 1863

Phalacrocera replicata (Linnaeus, 1758)

TRIOGMA Schiner, 1863

Triogma trisulcata (Schummel, 1829)

TIPULIDAE Latreille, 1802

CTENOPHORINAE Osten Sacken, 1887

tribe Ctenophorini Osten Sacken, 1887

CTENOPHORA Meigen, 1803

sg. Ctenophora Meigen, 1803

Ctenophora flaveolata (Fabricius, 1794)

Ctenophora guttata Meigen, 1818

Ctenophora nigriceps (Tjeder, 1949)

Ctenophora pectinicornis (Linnaeus, 1758)

DICTENIDIA Brulle, 1833

Dictenidia bimaculata (Linnaeus, 1761)

PHOROCTENIA Coquillett, 1910

Phoroctenia vittata (Meigen, 1830)

tribe Tanypterini Savchenko, 1966

TANYPTERA Latreille, 1804

sg. Tanyptera Latreille, 1804

Tanyptera atrata (Linnaeus, 1758)

Tanyptera nigricornis (Meigen, 1818)

DOLICHOPEZINAE Osten Sacken, 1887

DOLICHOPEZA Curtis, 1825

sg. Dolichopeza Curtis, 1825

Dolichopeza albipes (Strom, 1768)

Dolichopeza bifida Osterbrook & Lantsov, 2011

= *nitida* of authors

TIPULINAE Latreille, 1802

tribe Prionocerini Savchenko, 1966

PRIONOCERA Loew, 1844

Prionocera abscondita Lackschewitz, 1933

Prionocera chosenicola Alexander, 1945

- = dimidiata misid.
- = absentiva misid.

Prionocera pubescens Loew, 1844

Prionocera recta Tjeder, 1948

- = lapponica Tjeder, 1948
- = lackschewitzi Mannheims, 1951

Prionocera ringdahli Tjeder, 1948

Prionocera serricornis (Zetterstedt, 1838)

Prionocera subserricornis (Zetterstedt, 1851)

= proxima Lackschewitz, 1933

Prionocera turcica (Fabricius, 1787)

Prionocera woodoorum Brodo, 1987

tribe Tipulini Latreille, 1802

ANGAROTIPULA Savchenko, 1961

Angarotipula tumidicornis (Lundström, 1907)

NEPHROTOMA Meigen, 1803

Nephrotoma aculeata (Loew, 1871)

Nephrotoma analis (Schummel, 1833)

Nephrotoma appendiculata (Pierre, 1919)

Nephrotoma cornicina (Linnaeus, 1758)

Nephrotoma crocata (Linnaeus, 1758)

Nephrotoma dorsalis (Fabricius, 1781)

Nephrotoma flavescens (Linnaeus, 1758)

Nephrotoma lundbecki (Nielsen, 1907)

Nephrotoma lunulicornis (Schummel, 1833)

Nephrotoma pratensis (Linnaeus, 1758)

Nephrotoma quadristriata (Schummel, 1833)

Nephrotoma relicta (Savchenko, 1973)

Nephrotoma scurra (Meigen, 1818)

Nephrotoma submaculosa Edwards, 1928

Nephrotoma tenuipes (Riedel, 1910)

NIGROTIPULA Hudson & Vane-Wright, 1969

Nigrotipula nigra (Linnaeus, 1758)

TIPULA Linnaeus, 1758

sg. Acutipula Alexander, 1924

Tipula fulvipennis De Geer, 1776

Tipula maxima Poda, 1761

sg. Arctotipula Alexander, 1934

Tipula salicetorum Siebke, 1870

= nigricornis Zetterstedt, 1851

sg. Beringotipula Savchenko, 1961

Tipula unca Wiedemann, 1817

= hortensis Meigen, 1818

sg. Dendrotipula Savchenko, 1964

Tipula flavolineata Meigen, 1804

sg. Emodotipula Alexander, 1966

Tipula obscuriventris Strobl, 1900

sg. *Lindnerina* Mannheims, 1965

Tipula bistilata Lundström, 1907

Tipula subexcisa Lundström, 1907

sg. Lunatipula Edwards, 1931

Tipula affinis Schummel, 1833

Tipula circumdata Siebke, 1863

= livida misid.

Tipula fascipennis Meigen, 1818

Tipula humilis Staeger, 1840

Tipula laetabilis Zetterstedt, 1838

= dilatata Schummel, 1833

Tipula limitata Schummel, 1833

Tipula lunata Linnaeus, 1758

= *luna* mistake

? Tipula peliostigma Schummel, 1833

Tipula recticornis Schummel, 1833

Tipula selene Meigen, 1830

Tipula trispinosa Lundström, 1907

Tipula vernalis Meigen, 1804

sg. Odonatisca Savchenko, 1956

Tipula nodicornis Meigen, 1818

= juncea Meigen, 1818

sg. Platytipula Matsumura, 1916

Tipula luteipennis Meigen, 1830

Tipula melanoceros Schummel, 1833

sg. Pterelachisus Róndani, 1842

Tipula cinereocincta Lundström, 1907

Tipula crassicornis Zetterstedt, 1838

Tipula irrorata Macquart, 1826

Tipula jutlandica Nielsen, 1947

Tipula kaisilai Mannheims, 1954

Tipula laetibasis Alexander, 1934

Tipula luridorostris Schummel, 1833

Tipula matsumuriana ssp. pseudohortensis Lackschewitz, 1932

Tipula mutila Wahlgren, 1905

Tipula octomaculata Savchenko, 1964

Tipula pabulina Meigen, 1818

Tipula pauli Mannheims, 1964

Tipula pseudoirrorata Goetghebuer, 1921

Tipula recondita Pilipenko & Salmela, 2012

Tipula stenostyla Savchenko, 1964

Tipula submarmorata Schummel, 1833

= meigeni Mannheims, 1966

Tipula truncorum Meigen, 1830

Tipula varipennis Meigen, 1818

= pseudovariipennis misid.

Tipula wahlgreni Lackschewitz, 1925

Tipula winthemi Lackschewitz, 1932

sg. Savtshenkia Alexander, 1965

Tipula alpium Bergroth, 1888

Tipula benesignata Mannheims, 1954

Tipula confusa van der Wulp, 1883

= marmorata Meigen, 1818

Tipula gimmerthali Lackschewitz, 1925

Tipula grisescens Zetterstedt, 1851

Tipula interserta Riedel, 1913

Tipula invenusta Riedel, 1919

Tipula limbata Zetterstedt, 1838

Tipula obsoleta Meigen, 1818

Tipula pagana Meigen, 1818

Tipula signata Staeger, 1840

Tipula subnodicornis Zetterstedt, 1838

sg. Schummelia Edwards, 1931

Tipula variicornis Schummel, 1833

sg. Tipula Linnaeus, 1758

Tipula paludosa Meigen, 1830

= oleracea misid.

Tipula subcunctans Alexander, 1921

= czizeki de Jong, 1925

sg. Vestiplex Bezzi, 1924

Tipula excisa Schummel, 1833

Tipula hortorum Linnaeus, 1758

Tipula laccata Lundström & Frey, 1916

Tipula montana Curtis, 1834

Tipula nubeculosa Meigen, 1804

Tipula pallidicosta Pierre, 1924

Tipula scripta Meigen, 1830

Tipula sintenisi Lackschewitz, 1933

Tipula tchukchi Alexander, 1934

= bo Mannheims, 1967

sg. Yamatotipula Matsumura, 1916

Tipula chonsaniana Alexander, 1945

Tipula coerulescens Lackschewitz, 1923

Tipula couckei Tonnoir, 1921

Tipula fendleri Mannheims, 1963

Tipula freyana Lackschewitz, 1936

Tipula lateralis Meigen, 1804

Tipula marginella Theowald, 1980

= marginata Meigen, 1818

Tipula moesta Riedel, 1919

Tipula montium Egger, 1863

Tipula pierrei Tonnoir, 1921

= solstitialis Westhoff, 1879

Tipula pruinosa Wiedemann, 1817

Tipula quadrivittata Staeger, 1840

Excluded species

Trichocera japonica Matsumura, 1915

Twenty-two previously reported crane fly species were deleted from the Finnish list by Salmela (2012a); these are not repeated here.

References

- Byers GW (1992) Crane flies three families or one. Acta Zoologica Cracoviensia 35: 37–41.
- Dahl C (1968) Notes on the taxonomy and distribution of Trichoceridae (Dipt. Nemat.) from Finland and adjacent areas of the USSR. Opuscula Entomologica 33(3): 365–370.
- Dahl C, Alexander CP (1976) A world catalogue of Trichoceridae Kertész, 1902 (Diptera). Entomologica scandinavica 7(1): 7–18. doi: 10.1163/187631276X00027
- Oosterbroek P (2014) Catalogue of the Craneflies of the World. Online available at http://nlbif.eti.uva.nl/ccw/ (latest version 21 March 2014)
- Pape T, Blagoderov V, Mostovski MB (2011) Order Diptera Linnaeus, 1758. In: Zhang Z-Q (Ed) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness. Zootaxa 3148: 222–229. http://www.mapress.com/zootaxa/2011/f/zt03148p229.pdf
- Petersen MJ, Bertone MA, Wiegmann BM, Courtney GW (2010) Phylogenetic synthesis of morphological and molecular data reveals new insights into the higher-level classification of Tipuloidea (Diptera). Systematic Entomology 35: 526–545. doi: 10.1111/j.1365-3113.2010.00524.x
- Petrašiūnas A (2009) Taxonomic and phylogenetic review of the genus Trichocera Meigen, 1803 (Diptera, Trichoceridae). PhD Thesis, Vilniaus Universitetas. http://vddb.library.lt/fedora/get/LT-eLABa-0001:E.02~2009~D_20091202_112247-05545/DS.005.0.01.ETD
- Salmela J (2012a) Annotated list of Finnish crane flies (Diptera: Limoniidae, Tipulidae, Pediciidae & Cylindrotomidae). Entomologica Fennica 22: 219–242. http://ojs.tsv.fi/index.php/entomolfennica/article/view/5002/4535
- Salmela J (2012b) Biogeographic patterns of Finnish crane flies (Diptera, Tipuloidea). Psyche: A Journal of Entomology 2012: 913710. doi: 10.1155/2012/913710
- Salmela J (2013) Taxonomy, species richness and biogeography of Finnish crane flies (Diptera, Tipuloidea). Annales Universitatis Turkuensis Ser. AII 276: 1–118. http://www.doria.fi/bitstream/handle/10024/87628/AnnalesAII276SalmelaDISS.pdf?sequence=1
- Shtackelberg AA (1988) 1. Family Trichoceridae (Petauristidae). In: Bei-Bienko GY, Steyskal GC (Eds) Keys to the insects of the European part of the USSR. Volume 5: Diptera and Siphonaptera. Part 1. Amerind Publishing Co. Pvt. Ltd., New Delhi, Bombay, Calcutta & New York, 68–71.
- Starý J (1992) Phylogeny and classification of Tipulomorpha, with special emphasis on the family Limoniidae. Acta Zoologica Cracoviensia 35: 11–36.
- Starý J (1999) New species of the *Trichocera* (*Metatrichocera*) saltator species group (Diptera: Trichoceridae). Entomological problems 30(1): 1–10.
- Wiegmann BM, Trautwein MD, Winkler IS, Barr NB, Kim J-W, Lambkin C, Bertone MA, Cassel BK, Bayless KM, Heimberg AM, Wheeler BM, Peterson KJ, Pape T, Sinclair BJ, Skevington JH, Blagoderov V, Caravas J, Kutty SN, Schmidt-Otto U, Kampmeier GE, Thompson FC, Grimaldi DA, Beckenbach AT, Courtney GW, Friedrich M, Meier R, Yeats DK (2011) Episodic radiations in the fly tree of life. Proceedings of the National Academy of Sciences USA 108: 5690–5695.